**Work Order ID** 90754

*90754*



*September-24-12 2:57:06 PM*

**Item ID:** D2221-1

**Revision ID:**

**Item Name:** Rib

**Accept** *N900040100*

**Setup Start** *NS1* **Stop** *NS2*

**Start Date:** 9/24/12 **Start Qty:** 4.00 *4*

**Required Date:** 10/19/12 **Req'd Qty:** 4.00 *4*

**Cust Item ID:**

**Customer:**

**Reference:**

**Run Start** *NR1* **Stop** *NR2*

**Approvals:** **Process Plan:** MLJ **Date:** 12-09-25 **Tooling:** ______ **Date:** ______

**QC:** ______ **Date:** ______ **SPC (Y/N):** ______ **Date:** ______

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|---|---|---|---|---|---|---|---|---|---|

| Draw Nbr | Revision Nbr |
|---|---|
| D2221 | Rev H |

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|---|---|---|---|---|---|---|---|---|---|
| 100 *100* Large Fab Large Fab | Large Fab<br>**Memo**<br>1- Cut as per dwg D2221<br>2- Deburr and remove identification markings on tube | 0.00<br>0.00 | | | | 8 | 0 | | DL 12-11-01 |
| 110 *110* QC Quality Control | QC6- Inspect dimensions to drawing<br>**Memo** | 0.00<br>0.00 | | | | 8 | | | SY 12-11-01 |
| 120 *120* Packaging Packaging | Identify as per dwg & Stock Location: N/A<br>**Memo** | 0.00<br>0.00 | | | | 8 | | | SY 12-11-01 |

DQA: ________ Date: ____________

NCR: Yes / No

# WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

| Work Order: ______ | **DISPOSITION** | **AGAINST DEPARTMENT/PROCESS** | | | |
|---|---|---|---|---|---|
| Part No. ______ | Rework ☐ | Skid-tube ☐ | Crosstube ☐ | Water Jet ☐ | Engineering ☐ |
| NCR No. ______ | Scrap ☐ | Machining ☐ | Small Fab ☐ | Prod. Eng. Coor. ☐ | Quality ☐ |
| | Use-as-is ☐ | Thermoforming ☐ | Finishing ☐ | Rec/Store/Packaging ☐ | Other ☐ |
| | Work Order Update ☐ | Large Fab ☐ | Composite ☐ | Supplier ☐ | ☐ |

| **Root Cause** | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---|---|---|---|---|---|---|---|---|---|
| Doc/Data ☐ | | | | | | | | | |
| Equip/Tooling ☐ | | | | | | | | | |
| Operator ☐ | | | | | | | | | |
| Material ☐ | | | | | | | | | |
| Setup ☐ | | | | | | | | | |
| Other ☐ | | | | | | | | | |
| Process ☐ | | | | | | | | | |
| Supplier ☐ | | | | | | | | | |
| Training ☐ | | | | | | | | | |
| Unapproved ☐ | | | | | | | | | |

## FAULT CATEGORY

**Landing Gear**

- ☐ Bending
- ☐ Centre Not Concentric to O/S
- ☐ Cracks
- ☐ Crushed/Crimped.
- ☐ Cuffs
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Ripples in Bend
- ☐ Torque Waves in Extrusion
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

**General**

- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damaged
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drill Holes
- ☐ Drawing
- ☐ Finish
- ☐ Folio
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete
- ☐ Instructions Incomplete/Unclear
- ☐ Maintenance
- ☐ Mislabeled
- ☐ Misread
- ☐ Offset
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Ovalized
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other ____________

**Work Order ID 90754**

*September-24-12 2:57:06 PM*

*90754*



**Item ID:** D2221-1

**Revision ID:**

**Item Name:** Rib

**Accept** *N900040100*

**Setup** **Start** *NS1*

**Stop** *NS2*

**Start Date:** 9/24/12 **Start Qty:** 4.00 *4*

**Required Date:** 10/19/12 **Req'd Qty:** 4.00 *4*

**Cust Item ID:**

**Customer:**

**Reference:**

**Run** **Start** *NR1*

**Stop** *NR2*

**Approvals:** **Process Plan:** ______ **Date:** ______ **Tooling:** ______ **Date:** ______

**QC:** ______ **Date:** ______ **SPC (Y/N):** ______ **Date:** ______

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|---|---|---|---|---|---|---|---|---|---|
| 130 *130* | QC21- Final Inspection - Work Order Release | 0.00 | | | | | 12/11/6 | | |
| QC Quality Control | Memo | 0.00 | | | | | | | |

MLS 12-11-05

DQA: ________ Date: ____________

NCR: Yes / No

# WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

| Work Order: ____________ <br> Part No. ____________ <br> NCR No. ____________ | **DISPOSITION** <br> Rework ☐ <br> Scrap ☐ <br> Use-as-is ☐ <br> Work Order Update ☐ | **AGAINST DEPARTMENT/PROCESS** <br> Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐ <br> Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐ <br> Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐ <br> Large Fab ☐ Composite ☐ Supplier ☐ ☐ |
|---|---|---|

| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---|---|---|---|---|---|---|---|---|---|
| Doc/Data ☐ | | | | | | | | | |
| Equip/Tooling ☐ | | | | | | | | | |
| Operator ☐ | | | | | | | | | |
| Material ☐ | | | | | | | | | |
| Setup ☐ | | | | | | | | | |
| Other ☐ | | | | | | | | | |
| Process ☐ | | | | | | | | | |
| Supplier ☐ | | | | | | | | | |
| Training ☐ | | | | | | | | | |
| Unapproved ☐ | | | | | | | | | |

## FAULT CATEGORY

**Landing Gear**

- ☐ Bending
- ☐ Centre Not Concentric to O/S
- ☐ Cracks
- ☐ Crushed/Crimped
- ☐ Cuffs
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Ripples in Bend
- ☐ Torque Waves in Extrusion
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

**General**

- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damaged
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drill Holes
- ☐ Drawing
- ☐ Finish
- ☐ Folio
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete
- ☐ Instructions Incomplete/Unclear
- ☐ Maintenance
- ☐ Mislabeled
- ☐ Misread
- ☐ Offset
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Ovalized
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other ____________

# Picklist Print

*September-24-12 2:57:06 PM*



**Work Order ID:** **90754**

**Parent Item:** **D2221-1** **Start Date:** 9/24/12 **Required Date:** 10/19/12

**Parent Item Name:** Rib **Start Qty:** 4.00 **Required Qty:** 4.00

**Comments:** IPP Rev:A New Issue 08-12-02 DD verified by:EC IPP Rev:B 11.01.13 chg qc5 to 6 DD verified by:EC

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **M304TS0.750W.065**<br>304 SQ Tube .75x.75x.065W | | Purchased | No | | | 100 | f | 1,266.7990 | 8 | ~~33.684211~~ 67.3684 | | | |

DL 12-11-01

| Location | | Loc Qty | Loc Code | |
|---|---|---|---|---|
| MAT | | 293.167 | | |
| | 112398 | 0 | | |
| | 122051 | 293.167 | | |
| MAT017 | | 932.632 | | |
| | 122468 | 932.632 | 122468 ~~[illegible]~~ | |
| MAT018 | | 41 | | |
| | 7636 | 41 | | |

DQA: ________ Date: ____________

NCR: Yes / No

# WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

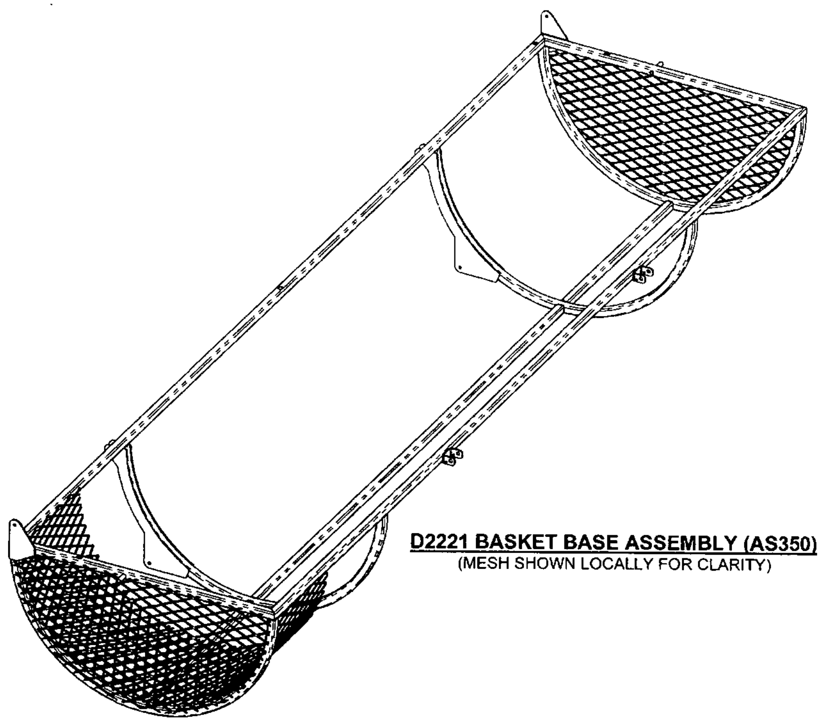
| | DISPOSITION | AGAINST DEPARTMENT/PROCESS |
|---|---|---|
| Work Order: ______________ | Rework ☐ | Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐ |
| Part No. ______________ | Scrap ☐ | Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐ |
| NCR No. ______________ | Use-as-is ☐ | Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐ |
| | Work Order Update ☐ | Large Fab ☐ Composite ☐ Supplier ☐ ☐ |

| Root Cause | | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---|---|---|---|---|---|---|---|---|---|---|
| Doc/Data | ☐ | | | | | | | | | |
| Equip/Tooling | ☐ | | | | | | | | | |
| Operator | ☐ | | | | | | | | | |
| Material | ☐ | | | | | | | | | |
| Setup | ☐ | | | | | | | | | |
| Other | ☐ | | | | | | | | | |
| Process | ☐ | | | | | | | | | |
| Supplier | ☐ | | | | | | | | | |
| Training | ☐ | | | | | | | | | |
| Unapproved | ☐ | | | | | | | | | |

## FAULT CATEGORY

| Landing Gear | General | | | |
|---|---|---|---|---|
| ☐ Bending | ☐ Bend | ☐ Grain | ☐ Ovalized | ☐ Pressure/Forced |
| ☐ Centre Not Concentric to O/S | ☐ BOM/Route | ☐ Hardware | ☐ Over/Under tolerance | ☐ Temperature/Cure |
| ☐ Cracks | ☐ Broken/Damaged | ☐ Inspection Incomplete | ☐ Part Incorrect | ☐ Weld |
| ☐ Crushed/Crimped | ☐ Burrs | ☐ Instructions Incomplete/Unclear | ☐ Part Lost/Missing | ☐ Wrong Stock Pulled |
| ☐ Cuffs | ☐ Contamination | ☐ Maintenance | ☐ Part Moved | |
| ☐ Heat Treat | ☐ Countersink | ☐ Mislabeled | ☐ Positioned Wrong | |
| ☐ Inspection Strip in Tube | ☐ Cut Too Short | ☐ Misread | ☐ Power Loss/Surge | ☐ Other |
| ☐ Ripples in Bend | ☐ Drill Holes | ☐ Offset | | |
| ☐ Torque Waves in Extrusion | ☐ Drawing | ☐ Out of Calibration | | |
| ☐ Turning Sequence | ☐ Finish | ☐ Out of Sequence | | |
| ☐ Wave/Twist in Tube | ☐ Folio | ☐ Outside Dimensions | | |

| ITEM | QTY | P/N | DESCRIPTION |
|---|---|---|---|
| 1 | X | D2221 | BASKET BASE ASSEMBLY (AS350) |
| 2 | 1 | D2221-1 | RIB |
| 3 | 2 | D2221-5 | RIB |
| 4 | 1 | D2221-7 | RIB |
| 5 | 2 | D2232-3 | BASKET HINGE |
| 6 | 2 | D2235-1 | RIB |
| 7 | 2 | D2581 | MOUNTING BRACKET |
| 8 | 2 | D3442-1 | SHIM |
| 9 | 2 | D3825-041 | RIB ASSY (BASKET END) |
| 10 | 2 | D3826-041 | RIB/GUSSET ASSY |
| 11 | 1 | D3827-041 | RIB ASSY (INBOARD) |
| 12 | 2 | D3833-1 | MESH, BASE END FACE |
| 13 | 1 | D3832-1 | MESH (BASE) |



**D2221 BASKET BASE ASSEMBLY (AS350)**
(MESH SHOWN LOCALLY FOR CLARITY)

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENTS
WITHOUT NOTICE
WORK ORDER
NO. 90754 MLJ
12-09-25

RELEASED 08/11/18

| REV. | DESCRIPTION | BY | DATE |
|---|---|---|---|
| H | REVISED PARTS LIST AND ADDED "ITEM" COLUMN TO PARTS LIST (ZN D3-1); REVISED SECTIONS A-A, B-B AND C-C (ZN C6-3, C2-3 AND A6-3); REVISED DETAIL D (ZN B7-4); ADDED DETAIL E (ZN A6-4); ADDED SECTION F-F (ZN B2-4); ADDED DWG DETAILS FOR D2221-1/-5/-7 (SHEET 5); TOL REVISED TO 2 DEC PLACES (ZN D8-3 AND ZN B4-3); D3825-041 REPLACES D2221-3/D2327-3; D3826-041 REPLACES D2235-1/D2325; D3827-041 REPLACES D2221-1 ON INBOARD SIDE; ADDED D3832-1 AND D3833-1. REASON: SATISFY "LEAN MANUFACTURING" PROGRAM. | MB | 08.09.18 |
| G | MATERIAL FOR -1, -3, -5 & -7 WAS 0.060 WALL; TOLERANCE FOR 96.00 DIM WAS +/-0.01 AND 56.00 DIM WAS REF (ZN B5-2); 19.62 DIM WAS "HARD" DIMENSION IS NOW "REF" (ZN B4-2); NOTE 5 TRANSFERED FROM SHT 1 TO SHT 2; SHT 2 MESH MATERIAL UPDATED; DRAWING TRANSFERED TO "B" FORMAT | AJS | 08.06.16 |
| F | ADD SHIM UNDER HINGE; ADD HOLES FOR SPLIT LID BASKET | PH | 05.06.07 |
| E | CHANGE HINGE | CP | 01.04.19 |
| D | CHANGE LATCH | BW | 96.06.21 |
| C | SEPARATE BASKET AND LID | KH | 95.11.21 |

NOTES:
1) MATERIAL: N/A
2) FINISH: POWDER COAT GLOSS WHITE (4.3.5.2) PER DART QSI 005 4.3
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
8) WEIGHT: 42.00 lbs APPROX
9) MASK ALL HOLES PRIOR TO POWDER COATING

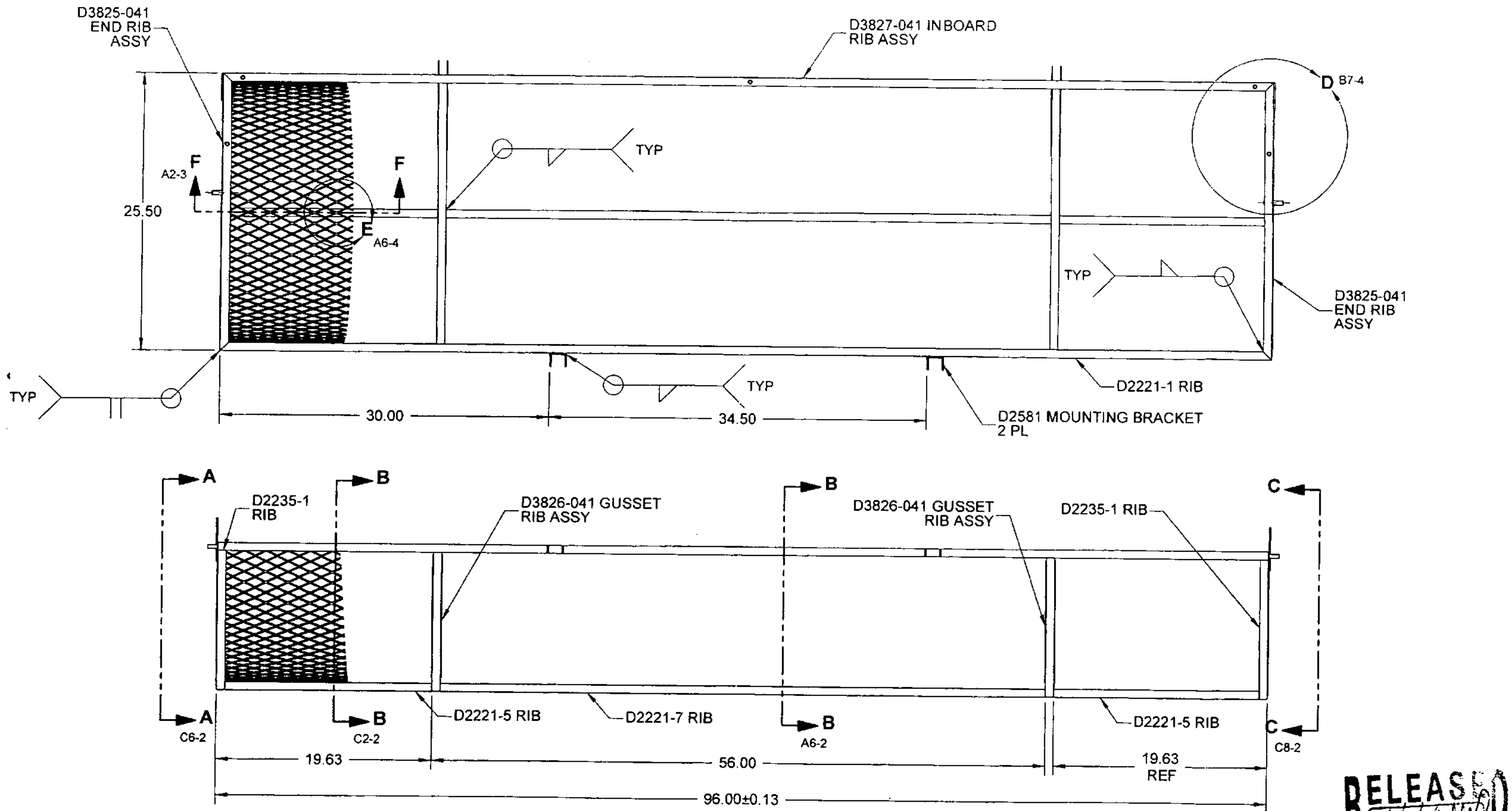
| | |
|---|---|
| DESIGN | BW |
| DRAWN | |
| CHECKED | |
| MFG. APPR. | |
| APPROVED | |
| DE APPR. | |
| DATE | 08.09.18 |

**DART AEROSPACE LTD**
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. D2221 — REV. H — SHEET 1 OF 5

TITLE: BASKET BASE ASSEMBLY (350) — SCALE: NTS

90754

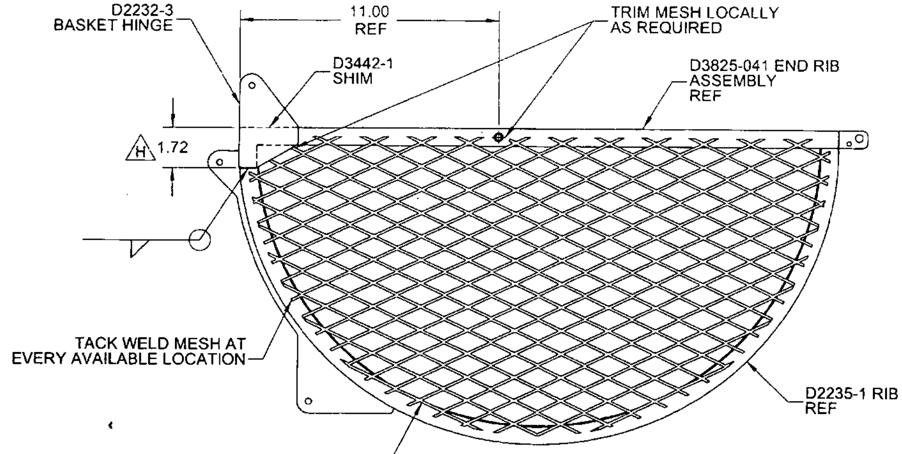



**D2221 BASKET BASE ASSEMBLY (350)**
(MESH SHOWN LOCALLY FOR CLARITY)

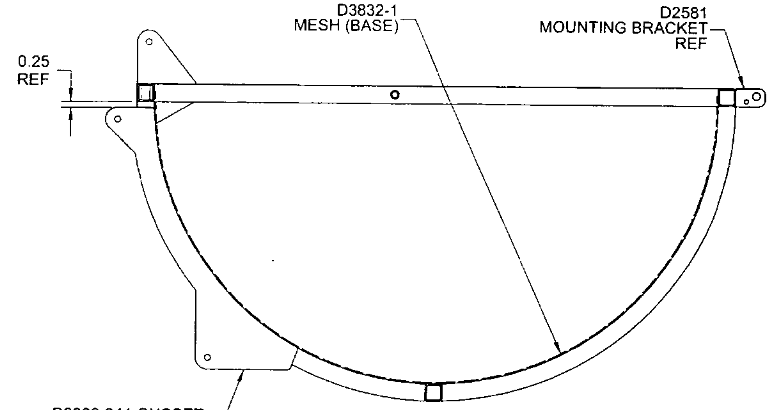
RELEASED 06/11/18

| DESIGN | BW | DART AEROSPACE LTD<br>HAWKESBURY, ONTARIO, CANADA |
|---|---|---|
| DRAWN | | |
| CHECKED | | DRAWING NO. D2221 — REV. H — SHEET 2 OF 5 |
| MFG. APPR. | | |
| APPROVED | | TITLE: BASKET BASE ASSEMBLY (350) — SCALE NTS |
| DE APPR. | | |
| DATE | 08.09.18 | |

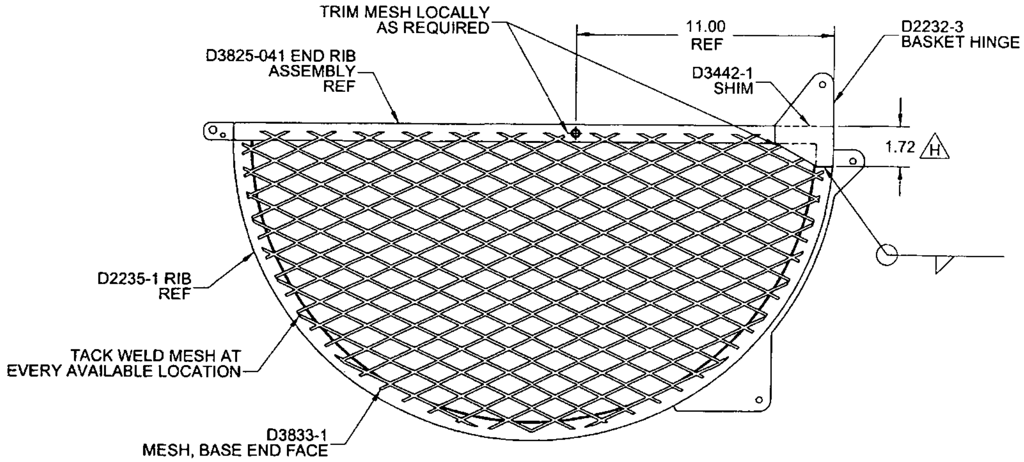
90754




H SECTION A-A B7-2
SCALE 2X




H SECTION B-B B6-2 B4-2
(D3833-1 MESH NOT SHOWN FOR CLARITY)
SCALE 2X

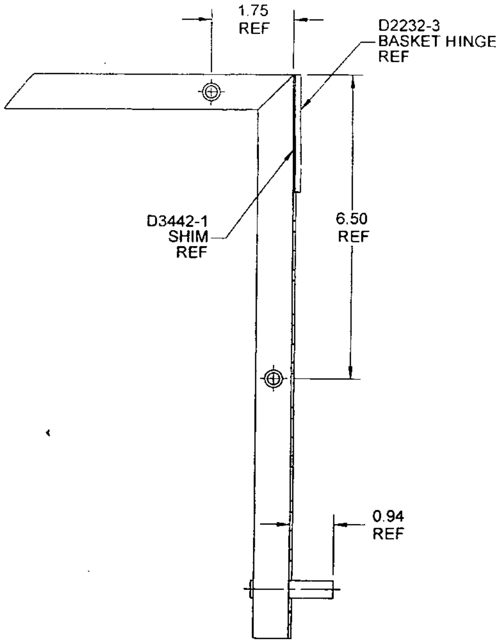



H SECTION C-C B2-2
SCALE 2X

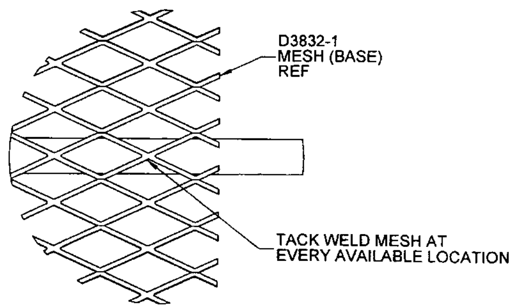
RELEASED 08/11/18

| | | |
|---|---|---|
| DESIGN | BW | DART AEROSPACE LTD<br>HAWKESBURY, ONTARIO, CANADA |
| DRAWN | | |
| CHECKED | | DRAWING NO. D2221 — REV. H — SHEET 3 OF 5 |
| MFG. APPR. | | |
| APPROVED | | TITLE: BASKET BASE ASSEMBLY (350) — SCALE NTS |
| DE APPR. | | |
| DATE | 08.09.18 | |

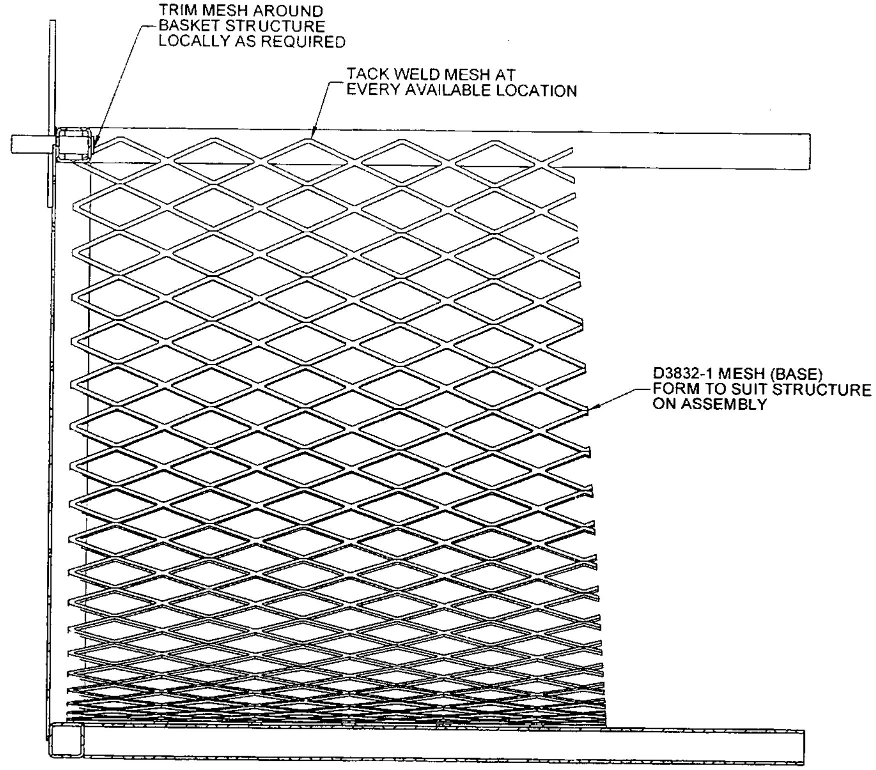
90754




H DETAIL D D2-2
SCALE 4X




H DETAIL E C6-2
SCALE 4X

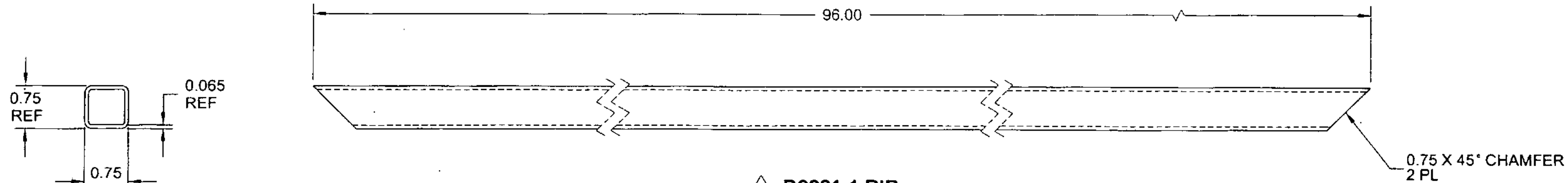



H SECTION F-F D7-2
SCALE 4X

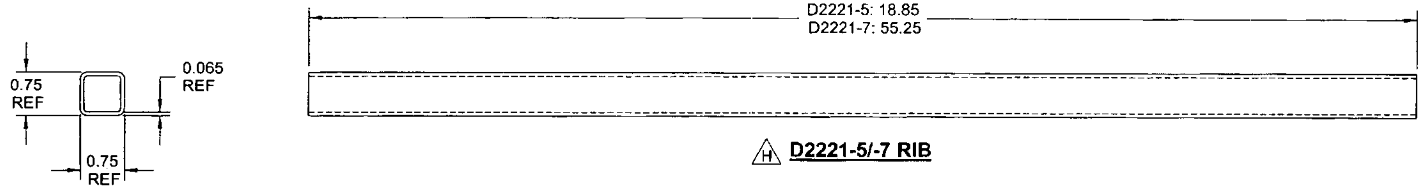
RELEASED 08/11/18

| DESIGN | BW | DART AEROSPACE LTD<br>HAWKESBURY, ONTARIO, CANADA |
|---|---|---|
| DRAWN | | DRAWING NO. D2221 REV. H SHEET 4 OF 5 |
| CHECKED | | |
| MFG. APPR. | | TITLE BASKET BASE ASSEMBLY (350) SCALE NTS |
| APPROVED | | |
| DE APPR. | | |
| DATE | 08.09.18 | |

90754




H D2221-1 RIB




H D2221-5/-7 RIB

RELEASED 08/11/18

NOTES:
1) MATERIAL: AISI 304/316 STAINLESS STEEL SQUARE TUBE, 0.75 X 0.75 X 0.065 WALL
REF. DART SPEC. M304TS0.750W0.065
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
8) WEIGHT:D2221 -1 = 4.57 lbs; D2221-5 = 0.90 lbs; D2221-7 2.65 = lbs

| | | |
|---|---|---|
| DESIGN | BW | **DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA |
| DRAWN | | |
| CHECKED | | DRAWING NO. D2221 — REV. H — SHEET 5 OF 5 |
| MFG. APPR. | | |
| APPROVED | | TITLE BASKET BASE ASSEMBLY (350) — SCALE NTS |
| DE APPR. | | |
| DATE | 08.09.18 | |